

33. The method of claim 6, further comprising the steps of:
receiving operating instructions at said one or more origination transmitters, said operating instructions effective to control a processor to respond to one of said first control signal and said second control signal; and
transmitting said operating instructions to one of said intermediate transmitter station and said plurality of receiver stations.
34. The method of claim 7, further comprising the steps of:
receiving operating instructions at said one or more transmitter station, said operating instructions effective to control a processor to respond to control signal; and
transmitting said operating instructions to at least one of said plurality of receiver stations.--

II. REMARKS

A. Introduction

The Office Action dated March 19, 1997 (Office Action) has been carefully reviewed and the foregoing amendments made in response thereto.

Claims 3-34 stand rejected under 35 U.S.C. § 112 second paragraph.

Claims 6, 7 and 22 stand rejected under 35 U.S.C. § 102(a) as being anticipated by Matsumoto et al.

Claims 7 and 34 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Fletcher et al.

Claims 6 and 22 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Cox et al.

Claims 3-5, 8-20 and 23-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fletcher et al. in view of "Microcomputers in Security Dealing" by Gaines et al.

Claims 21 and 25-32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cox et al. in view of "Project SCORE" by Brown.

Claim 33 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Cox et al. in view of Zaboklicki.

Claims 3-34 are rejected under the judicially created doctrine of non-obviousness non-statutory double patenting claims in U.S. Patents 4,694,490; 4,704,725; 4,965,825; and 5,109,414; and copending U.S. application 08/113,329 and related U.S. applications numbered 1-327 in the Office Action, Paper No. 10 (p. 13-15) , mailed on December 11, 1996.

Claims 3, 6, 7, 12, 13, 15, 21, 22, 25 & 30 are amended. Claims 3-34 remain active in this application.

All remaining claims remain active in this application. In accordance with the foregoing, the claims have been amended to improve clarity, and further, to respond to certain rejections made by the Examiner arising under 35 U.S.C. § 112. The Examiner's comments on the claims are acknowledged and appreciated. No new matter is presented in the foregoing amendments. Approval and entry of same is respectfully requested.

Paragraph 6 of the Office Action states that "determination of a possible non-statutory double patenting rejection obvious-type in each of the related 327 applications over each other will be deferred until a later time." (Office Action, p. 12 at lines 6-10). Applicants submit that the Examiner and the PTO cannot defer further rejections to a later time. Every ground of rejection should be made in Examiner's first Office Action. Title 37 of the CFR states that "[o]n taking up an application for examination . . . the Examiner shall make a thorough study thereof and shall make a thorough investigation

of the available prior art relating to the subject matter of the claimed invention. The examination shall be complete with respect to both compliance of the application . . . with the applicable statutes and rules and to the patentability of the invention as claimed, as well as with respect to matters of form, unless otherwise indicated.” 37 CFR § 1.104(a). The MPEP states “[t]he Examiner’s action will be complete as to all matters, except that in appropriate circumstances, such as misjoinder of invention, fundamental defects in the application, and the like, the action of the Examiner may be limited to such matters before action is made.” MPEP § 707.07, quoting 37 CFR § 1.105. Finally, “[p]iecemeal examination should be avoided as much as possible. The Examiner ordinarily should reject each claim on all valid grounds available . . . Where a major technical rejection is proper, it should be stated with full development of reasons rather than by mere conclusion coupled with some stereotyped expression.” MPEP §707.07(g). Applicants submit that the Examiner has a duty to give each application a complete examination, that rejections be made with specificity, and that deferred rejections are not allowed. For these reasons, Applicants likewise traverse the rejection based on the “judicially created doctrine of double patenting over the claims of copending U.S. application 08/113,329 and the following [list of all Applicants’ copending applications].” Applicants submit that this rejection, even if appropriately made with specificity, should be a provisional double patenting rejection. Applicants respectfully request that this rejection be withdrawn.

As to paragraph 5, related to the multiplicity rejection in parent file 07/096,096, Applicants submit that the PTO gave a multiplicity rejection in this case and limited Applicants to twenty-five claims. Roughly one hundred claims had been originally filed. There was no substantive review of any of the other claims outside of the twenty five. Applicants were not permitted to submit additional claims although a request was made. The disclosure of Applicants address too many subject areas to be adequately

covered by a small number of claims. Applicants submit that "nexus" analysis is not required by Applicants.

B. Response to Rejections under 35 U.S.C. §112

1. General Remarks

In accordance with the foregoing, the claims have been amended to improve clarity, and further, to respond to certain rejections made by the examiner arising under 35 U.S.C. § 112. The examiner's comments on the claims is acknowledged and appreciated. No new matter is presented in the foregoing amendments. Approval and entry of same is respectfully requested.

As to the 35 U.S.C. § 112 rejections, applicants assert that one of ordinary skill in the art would have appreciated the use of the provided terminology. The Office Action rejects all claims in the present application under 35 U.S.C. § 112, second paragraph. The Office Action states that the "examiner is not certain that the [metes] and bounds of these claims can be determined because of the language in the disclosure and claims." It further states that "[a]pplicants are being requested to reference the claim limitations in this application to the disclosure so that the [metes] and bounds of these claims can be properly considered." Applicants traverse this rejection and submit that applicants have no duty to comply with this requirement. MPEP § 2111 states that "[d]uring patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.'" Also, it is only "when the specification provides definitions for terms appearing in the claims that the specification can be used in interpreting claim language." MPEP § 2111.01. The examiner has the responsibility of reading the specification to determine the meaning of terms in the claims of the application.

In their 1987 continuation-in-part specification, Applicants disclose "an integrated system of programming communication" which encompasses many

inventions and deliberately includes many embodiments. Their teaching technique is to introduce the principles of their integrated system in a series of *related* examples. Each example builds upon structure and principles introduced earlier. Examining basic principles in detail in early examples, enables the specification with concreteness to expand and extend the scope of the teaching in later examples.

Starting with "**One Combined Medium**" on page 19 which focuses on the creation and delivery of a receiver specific graph in a broadcast or cablecast television program, "Wall Street Week," the specification introduces concepts of personalization of mass media and broadcast control of receiver station computing equipment. At page 28 *et seq.* it describes apparatus that include signal processors and signal decoders and introduces the concept of a signal processor *system*. At page 40 *et seq.* it teaches the composition of signal information and the organization of message streams.

Then in a series of four **examples, #1 through #4** which begin on pages 108, 143, 162, and 197 respectively, the specification demonstrates how receiver stations communicate signal processor apparatus and methods ("*SPAM*") processor code and data of the integrated system of programming communication to *some* apparatus they actuate, how decryption occurs, how metering and monitoring take place, and how actuated apparatus perform. Each example builds on concepts introduced earlier in the specification to provide a detailed teaching of its own subject matter, and a particularly important teaching occurs from pages 156 through 162 where the specification teaches the structure and operating capabilities of a *controller of a decoder*.

Building on all that precedes it, **example #5**, which begins on page 248, then relates how the integrated system processes a multichannel communications system, which conveys different types of signals, in order to monitor programming availability and enable receiver station apparatus to receive desired programming.

From pages 278 through 312, in **example #6** and especially **example #7**, which includes both digital and analog television signals and relates to the "Wall Street Week"

program (and which has further disclosure at pages 427 through 447), the specification teaches regulating reception and use of programming of the integrated system of programming communication.

At page 312 *et seq.* it relates further monitoring concepts.

From page 324 through page 390 the specification teaches a series of transmitter station and transmitter network concepts. This portion of the specification also relies on all previous disclosure in that special attention is given to intermediate transmission stations which, *as receiver stations*, respond to programming transmissions of the integrated system as well as storing, organizing, generating, and transmitting programming. At page 340 *et seq.* **example #8** teaches distribution to, storage and organization at, and retransmission from intermediate transmission stations ("*ITS*") of SPAM programming -- most specifically television spot commercials. At page 354 *et seq.* **example #9** teaches automating intermediate transmission station combined medium operations by describing how an intermediate transmission station responds to an intermediate generation set and other elements of the integrated system to generate processor code and data and transmit the code and data with SPAM programming -- spot commercial unit Q of example #8 -- all of which are subsequently shown in the specification to operate at receiver stations to deliver receiver specific programming at video monitors, speakers, printers, and transmitters (telephones which communicate to remote data collection stations). At page 374 *et seq.* **example #10** extends the transmitter and network automating concepts of examples #8 and #9 by disclosing *a plurality of* intermediate transmission stations generating processor code and data, in the fashion of example #9, and inserting different code and data into a *network originated* transmission of SPAM programming -- again the unit Q television spot commercial.

From page 390 through 516, the specification discloses further ultimate receiver station ("*URS*") automation concepts, including regulating the URS environment (page 396 *et seq.*), controlling multiple receivers and output devices to present coordinated

output (page 406 *et seq.*), receiving selected programming of the integrated system (page 419 *et seq.*), certain *integrated system computer system concepts* (page 427 *et seq.*), whose **example #7** (page 427 *et seq.*) description relies on the receiving selected programming concepts of pages 419-427. At page 447 *et seq.* the specification discloses certain data maintenance, timing control, efficiency, and other concepts involved in controlling combined media operations. At page 457 *et seq.* the specification discloses certain timing, imaging, communication, and transmission processing concepts that relate to efficient delivery of integrated system programming. At page 463 *et seq.* the specification relates to user specific audio, print, and other combined media besides receiver specific video.

With all this preparation, the specification teaches, from page 469 through page 516, the combined media presentation of **examples #9 and #10** at a plurality of ultimate receiver stations (which are responding to signals sent by different intermediate transmission stations).

At page 516 *et seq.* the specification discloses enhancing and extending functionality of the integrated system by reprogramming receiver apparatus and enabling receiver stations to process transmissions having new forms of composition.

Finally, at page 533 *et seq.* the specification discloses "**Summary Example**" (#11) which teaches a very large scale integrated data processing and communications problem and its solution(s), using *all of* the disclosed integrated system with iterative broadcasting, response, and refinement.

Because of the integrated nature of the disclosure, no part of the specification is intended to be considered *in isolation*. However, regarding the present application, the claims are generally directed to concepts related to accessing data and information at a receiver station, said data and information related to a problem, and generating or communicating information related to explaining a solution to said problem.

With respect to claim 3, see Applicants' 1987 Specification, pp. 19-28, 463-469 and 533-557 (especially page 551, line 15 to page 552, line 7; page 553, line 1 to page 554, line 11; and page 554, line 22 to page 555, line 13).

With respect to claim 6, 7, 25 & 30, see Applicants' 1987 Specification, pp. 19-28, 324-390, 463-469 and 533-557 (especially page 551, line 15 to page 552, line 7; page 553, line 1 to page 554, line 11; and page 554, line 22 to page 555, line 13).

Applicants provide these specific embodiments in support of the pending claims by way of example only. The claims must be read as broadly as is reasonable in light of the specification, and Applicants in no way intend that their submission of excerpts/examples be construed to unnecessarily restrict the scope of the claimed subject matter. Applicants will provide additional specification support in their detailed response to the Examiner's specific rejections provided *infra*.

2. Remarks and Argument in Response to Examiner's General Objections

Applicants have amended the pending claims in response to various of the Examiner's objections and queries. Applicants believe that all pending claims clearly define the metes and bounds of the claimed subject matter, and are supported by an adequate written description that is fully enabling. Applicants will address each paragraph of the Office Action regarding rejections and objections under 35 U.S.C. § 112 and related sections of the CFR and MPEP below.

3. Remarks and Argument in Response to Examiner's Specific Objections

Applicants respectfully submit that amended claims 6, 7 & 21 of the subject application particularly point out and claim the subject matter sufficiently for one of ordinary skill in the art to comprehend the bounds of the claimed invention. The test for definiteness of a claim is whether one skilled in the art would understand the bounds of the patent claim when read in light of the specification, and if the claims so

read reasonably apprise those skilled in the art of the scope of the invention, no more is required. Credle v. Bond, 25 F.3d 1556, 30 U.S.P.Q.2d 1911 (Fed. Cir. 1994). The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope. In re Warmerdam, 33 F.3d 1354, 31 U.S.P.Q.2d 1754 (Fed. Cir. 1994). Applicants have amended the pending claims to enhance clarity and respectfully submit that said claims are fully enabled by the specification and distinctly indicate the metes and bounds of the claimed subject matter. Applicants will address the Examiner's particular objections and questions *infra*.

Claims 6 & 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

The following changes have been made to the claim language to overcome this rejection:

claim 6, line 8, "at least one" has been changed to -- said at least one --; and
claim 21, line 1, "a computer" has been changed to -- said computer --.

Applicants' believe that the above recited changes are sufficient to overcome the rejections under 35 U.S.C. 112, first and second paragraph, and respectfully request withdrawal of these rejections. Applicants provide these specific embodiments in support of the pending claims by way of example only. The claims must be read as broadly as is reasonable in light of the specification, and Applicants in no way intend that their submission of excerpts/examples be construed to unnecessarily restrict the scope of the claimed subject matter.

C. Response to Rejection of Claims for Absence of Novelty

1. 35 U.S.C. §102(a) Rejection over Matsumoto et al., U.S. Pat No. 4,245,245.

Claims 6, 7 & 22 are rejected under 35 U.S.C. 102(a) as being anticipated by Matsumoto et al., U.S. Pat No. 4,245,245.

With respect to Applicants' amended claims 6 & 7, Matsumoto et al. fails to teach, *inter alia*, a "control signal effective at said at least one of a plurality of receiver stations to control said computer to compute a receiver specific value by processing information stored in said computer, compute a receiver specific signal based on said receiver specific value, and communicate a unit of programming to said output device based on said receiver specific signal." The Office Action states that in Matsumoto, a receiver specific value (channel selected from the channel selector) is stored in processor 34. The channel selected in Matsumoto is not "computed" as recited in claims 6 and 7. The mere selection of the channel for tuning the electronic tunable converter, or the fact that the channel is stored in a computer in Matsumoto does not meet the limitation of computing a receiver specific value as recited in claims 6 and 7. Further, the Office Action states that in Matsumoto, a receiver specific signal is generated in the electronic tunable converter which represents the receiver specific value. However, the electronic tunable converter in Matsumoto does not "compute" a receiver specific signal. The converter in Matsumoto just selects the desired channel from the multiple channels transmitted and converts the desired channel so that it can be received by the TV receiver (Matsumoto, col. 28 lines 24-29). The electronic tunable converter does not have the means to perform computations (Matsumoto, Fig. 21).

Applicants' respectfully submit that the cited art does not anticipate claims 6 & 7 since the reference fails to disclose every element of the claimed invention, and Applicants respectfully request that the 35 U.S.C. §102(a) rejection of claim 6 be withdrawn.

Claims 21, 22 & 33 depend upon independent claim 6, and claim 34 depends upon independent claim 7. As discussed *supra*, Matsumoto et al. fails to disclose every element of claims 6 & 7 and thus, *ipso facto*, Matsumoto et al. fails to anticipate dependent claims 21, 22, 33 & 34 and therefore, these rejections should be withdrawn and the claims be permitted to issue.

**2. 35 U.S.C. §102(e) Rejection over Cox et al., U.S. Pat.
No. 4,388,645**

Claims 6 & 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Cox et al., U.S. Pat. No. 4,388,645.

Applicants respectfully traverse this rejection and submit that the Office Action has misapplied the Cox reference. The Office Action states that “the satellite transmitter 10 receives signals from an earth station and retransmits the received signals to a plurality of receiver stations.” Cox, however, states that the satellite transmitter transmits signals which are received by a cable head end and then rebroadcast over a cable from the head end to a plurality of subscriber television receivers (Cox col. 3, lines 23-27). Also, the Office Action states that the claimed “computer” in the receiver station in claim 6 corresponds to the microprocessor (col. 8 line 12) in Cox. However, Cox states in this section of his specification that the microprocessor is an alternate embodiment of the sequential comparator 46 in Fig. 1. This comparator is not part of the receiver, but is a part of the multi-page teletext decoder 22 which is part of the head end facility 12 that receives the signal from the satellite (Cox Figs. 1, 4, 6). With respect to Applicants’ amended claim 6, Cox et al. fails to teach, *inter alia*, a “computer” in the television receiver of Cox. In contrast, the computer recited in claim 6 is a part of the receiver station.

Applicants’ respectfully submit that the cited art does not anticipate claim 6 since the reference fails to disclose every element of the claimed invention, and Applicants respectfully request that the 35 U.S.C. §102(e) rejection of claim 6 be withdrawn.

Claims 21, 22 & 33 depend upon independent claim 6. As discussed *supra*, Cox et al. fails to disclose every element of claim 6 and thus, *ipso facto*, Cox et al. fails to anticipate dependent claims 21, 22 & 33, and therefore, these rejections should be withdrawn and the claims be permitted to issue.

With respect to the rejection of claim 21, neither Cox et al. nor Brown either alone or in combination teach or suggest all Applicants' claim recitations, and therefore, Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 21 be withdrawn.

With respect to the rejection of claim 33, neither Cox et al. nor Zaboklicki either alone or in combination teach or suggest all Applicants' claim recitations, and therefore, Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 33 be withdrawn.

3. 35 U.S.C. §102(b) Rejection over Fletcher et al., U.S. Pat. No. 4,054,911.

Claims 7 & 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Fletcher et al., U.S. Pat. No. 4,054,911.

With respect to Applicants' amended claim 7, Fletcher et al. fails to teach, *inter alia*, communicating the control signal to a transmitter at a specified time as recited in claim 7. Furthermore, Fletcher et al. does not teach computing a receiver specific signal based on a receiver specific value. Fletcher et al. simply states that the processor 300 compares the limits, then provides an alert signal on the screen. Fletcher et al. does not disclose or suggest the claim 7 limitation of computing a receiver specific signal based on a receiver specific value. Fletcher et al. does not anticipate the inventions in the present application.

Applicants' respectfully submit that the cited art does not anticipate claim 7 since the reference fails to disclose every element of the claimed invention, and Applicants respectfully request that the 35 U.S.C. §102(b) rejection of claim 7 be withdrawn.

Claim 34 depends upon independent claim 7. As discussed *supra*, Fletcher et al. fails to disclose every element of claim 7 and thus, *ipso facto*, Fletcher et al. fails to anticipate dependent claim 34, and therefore, these rejections should be withdrawn and the claims be permitted to issue.

Applicants further respectfully submit that the claims in the present application should be allowed because these methods are not disclosed, taught, suggested, or implied by the applied prior art. For a prior art reference to anticipate in terms of 35 U.S.C. §102, every element of the claimed invention must be identically shown in a single reference. In re Bond, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. Scripps Clinic & Research Foundation v. Genetech, Inc., 927 F.2d 1565, 18 U.S.P.Q.2d 1001, 18 U.S.P.Q.2d 1896 (Fed. Cir. 1991). Absence from a cited reference of any element of a claim negates anticipation of that claim by the reference. Kloster Speedsteel AB v Crucible, Inc., 230 U.S.P.Q. 81 (Fed. Cir. 1986), on rehearing, 231 U.S.P.Q. 160 (Fed. Cir. 1986).

D. Response to Rejection of Claims for Non-Obviousness

1. 35 U.S.C. §103(a) Rejection over Fletcher et al., U.S. Pat No. 4,054,911 in view of Gaines.

Claims 3-5, 8-20, 23 & 24 are rejected under 35 U.S.C. 103(a) as being rejected by Fletcher et al., U.S. Pat No. 4,054,911 in view of Gaines.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference to combine the teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references combined) must teach or suggest all the claim recitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not based on Applicants' disclosure. In re Vaack, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). MPEP 706.02(j).

With respect to Applicants' claim 3, Fletcher et al. fails to, *inter alia*, teach or suggest all the claim recitations, e.g., generating a receiver specific signal based on a

receiver specific value. The Office Action states that the output of the comparison, in Fletcher, is the “receiver specific value” recited in claim 3, and that a signal which outputs information to the screen for display, in Fletcher, is the recited receiver specific signal. Fletcher, however, simply states that the processor 300 compares the buy or sell limits with the real-time stock price, then provides an alert signal on the screen. Fletcher et al. does not disclose or suggest the concept of generating a receiver specific signal based on a receiver specific value as recited in claim 3.

Further, the alert signal, of Fletcher, is not a “unit of programming” as recited in claim 3. Therefore, Fletcher et al. does not disclose or suggest the limitation in claim 3 of communicating a unit of programming to said output device based on said generated receiver specific signal. Fletcher et al. does not teach the limitations in claim 3, nor would these limitations be obvious from Fletcher.

Applicants, moreover, submit that the combination of Fletcher et al. and Gaines et al. does not achieve the limitation of delivering a receiver specific program including two or more units of programming at one or more output devices as recited in claim 3. Gaines et al. discloses the outputting of the comparison of two stocks’ information. This information of the stock prices and history of the stock prices are not “units of programming” as recited in claim 3. The stock prices, along with their stored history, are data that is processed by programming in the computer to generate the output display.

Neither Fletcher et al. nor Gaines et al. either alone or in combination teach or suggest all Applicants’ claim recitations, and therefore, Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 3 be withdrawn.

Claims 4-5, 8-20, 23 & 24 depend upon independent claim 3. As discussed *supra*, Fletcher et al. in view of Gaines et al. fails to disclose every element of claim 3 and thus, *ipso facto*, Fletcher et al. in view of Gaines et al. fails to anticipate dependent claims 4-5,

8-20, 23 & 24, and therefore, these rejections should be withdrawn and the claims be permitted to issue.

2. 35 U.S.C. §103(a) Rejection over Cox et al., U.S. Pat No. 4,054,911 in view of Brown et al.

Claims 25-30 are rejected under 35 U.S.C. 103(a) as being rejected by Cox et al., U.S. Pat No. 4,054,911 in view of Brown et al.

With respect to Applicants' claim 25, Cox et al. fails to, *inter alia*, teach or suggest all the claim recitations, e.g., said second control signals...operable to cause said computer in said intermediate transmitter station to select a specific first control signal and to communicate said selected first control signal to at least one of said transmitters of said intermediate transmitter station; and...said selected first control signal operable at said receiver station to control a second computer to generate a receiver specific value by processing information stored in said second computer, generate a receiver specific signal based on said receiver specific value, and communicate a unit of programming to an output device based on said receiver specific signal.

First, the Office Action equates Cox et al.'s satellite transmitter 10 with Applicants' intermediate transmitter station. However, Cox et al. merely discloses that the "orbiting satellite 10 is operative for transmitting multiple channels of television signals which are received by a cable head end facility 12 and then rebroadcast over a cable 14 to a plurality of subscriber television receivers 16." (Column 3, lines 23-27.) Cox et al., however, fails to teach or suggest a second control signal operable to cause said computer in said intermediate transmitter station to select a specific first control signal and to communicate said selected first control signal to at least one of said transmitters of said intermediate transmitter station.

Additionally, the Office Action equates Cox et al.'s cable head end facility 12 and time code signals (column 4, lines 23-25), with Applicants' receiver station and the first selected control signal, respectively. However, Cox et al. teaches

"the time-on and time-off codes are stored in row address 24 of each page memory 38a-38c [which] are coupled to...inputs of sequential comparator 46. Whenever the time interval defined by the time-on and time-off codes stored in at least one of the page memories 38a-38c corresponds to row 25 time of day code, the sequential comparator 46 will enable the select input of the respective page memory together with its 'read' input. As a consequence, the programming guide page stored in the enabled page memory is read out from the memory onto an output data bus 48 and coupled to a conventional teletext RGB display generator...which decodes the stored teletext information...in response to timing signals from the time base circuit 32 and develops corresponding output R, G, B baseband video signals for application to channel modulator 24...to form a standard NTSC television signal...for distribution to the subscriber receivers 16." (Column 5, line 68 to column 6, line 21).

Cox et al. fails to teach or suggest a selected first control signal (Cox et al.' time codes) operable at said receiver station to control a second computer to generate a receiver specific value and receiver specific signal by processing information stored in said second computer. Cox et al. merely teaches that the time codes which are stored in the page memories (38a-38c) are compared with the time of day code in line 25 of the page memories to enable the sequential comparator to select a specific page memory. The selected page memory is then converted into conventional teletext and modulated into a standard television signal for communication to the subscriber station. Cox et al. merely teaches the selection of a specific page memory based in the timing codes, not the generation of a receiver specific value and a receiver specific signal based on a control signal controlling a computer.

Neither Cox et al. nor Brown either alone or in combination teach or suggest all Applicants' claim recitations, and therefore, Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 25 be withdrawn.

Claims 26-29 depend upon independent claim 25. As discussed *supra*, Cox et al. in view of Brown fails to disclose every element of claim 25 and thus, *ipso facto*, Cox et al. in view of Brown fails to anticipate dependent claims 26-29, and therefore, these rejections should be withdrawn and the claims be permitted to issue.

With respect to Applicants' claim 30, Cox et al. fails to, *inter alia*, teach or suggest all the claim recitations, e.g., storing said one or more received first control signals in one or more of said storage devices at said intermediate transmitter station; selecting one or more of said received first control signals to be communicated to one or more of said transmitters of said intermediate transmitter station; and each of said selected first control signals operable at said receiver station to control a second computer to generate a receiver specific value by processing information stored in said second computer, generate a receiver specific signal based on said receiver specific value.

First, the Office Action equates Cox et al.'s satellite transmitter 10 with Applicants' intermediate transmitter station. However, Cox et al. merely discloses that the "orbiting satellite 10 is operative for transmitting multiple channels of television signals which are received by a cable head end facility 12 and then rebroadcast over a cable 14 to a plurality of subscriber television receivers 16." (Column 3, lines 23-27.) Cox et al., however, fails to teach or suggest storing said one or more received first control signals in one or more of said storage devices at said intermediate transmitter station; and selecting one or more of said received first control signals to be communicated to one or more of said transmitters of said intermediate transmitter station. Cox et al. fails to disclose any type of storage device on the orbiting satellite 10 and fails to teach or suggest the selection of any control signals to be communicated from the satellite.

Additionally, the Office Action equates Cox et al.'s cable head end facility 12 and time code signals (column 4, lines 23-25), with Applicants' receiver station and the first selected control signal, respectively. However, Cox et al. teaches

"the time-on and time-off codes are stored in row address 24 of each page memory 38a-38c [which] are coupled to...inputs of sequential comparator 46. Whenever the time interval defined by the time-on and time-off codes stored in at least one of the page memories 38a-38c corresponds to row 25 time of day code, the sequential comparator 46 will enable the select input of the respective page memory together with its 'read' input. As a

consequence, the programming guide page stored in the enabled page memory is read out from the memory onto an output data bus 48 and coupled to a conventional teletext RGB display generator...which decodes the stored teletext information...in response to timing signals from the time base circuit 32 and develops corresponding output R, G, B baseband video signals for application to channel modulator 24...to form a standard NTSC television signal...for distribution to the subscriber receivers 16.” (Column 5, line 68 to column 6, line 21).

Cox et al. fails to teach or suggest a selected first control signal (Cox et al.’ time codes) operable at said receiver station to control a second computer to generate a receiver specific value and receiver specific signal by processing information stored in said second computer. Cox et al. merely teaches that the time codes which are stored in the page memories (38a-38c) are compared with the time of day code in line 25 of the page memories to enable the sequential comparator to select a specific page memory. The selected page memory is then converted into conventional teletext and modulated into a standard television signal for communication to the subscriber station. Cox et al. merely teaches the selection of a specific page memory based in the timing codes, not the generation of a receiver specific value and a receiver specific signal based on a control signal controlling a computer.

Neither Cox et al. nor Brown either alone or in combination teach or suggest all Applicants’ claim recitations, and therefore, Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 30 be withdrawn.

Claims 31 & 32 depend upon independent claim 30. As discussed *supra*, Cox et al. in view of Brown fails to disclose every element of claim 30 and thus, *ipso facto*, Cox et al. in view of Brown fails to anticipate dependent claims 31 & 32, and therefore, these rejections should be withdrawn and the claims be permitted to issue.

E. Response To Rejection Based On MPEP § 804 (II)(B)(2)

1. Introduction

As to the Office Action's rejection of Applicants' claim under a non-statutory non-obvious type of double patenting, Applicants strongly traverse the Examiner's double patenting rejection on three separate grounds which are set forth in the reply brief for Serial No. 08/113,329 (Atty. Docket No. 05634.008), incorporated herein by reference. For the sake of brevity, these arguments will not be set forth herein; the Examiner is respectfully directed to the above-mentioned reply brief.

As an initial matter, the Examiner's rejection of the present application under the Schneller double patenting theory based on Harvey U.S. Patents 4,694,490 and 4,704,725 is improper because the present application does not claim the benefit of those applications under 35 U.S.C. § 120. Thus, there could never have been a basis for claiming the present subject matter in those applications. Therefore, the rejection based on Harvey U.S. Patents 4,694,490 and 4,704,725 should be withdrawn.

Moreover, the PTO fails to specifically identify all claims from cited Harvey patents that cover specific claims in the present application. Rather, the Office Action references "representative claims" from patents and the present application. The Office Action does not cite specific elements from claims in a patent covering specific elements in claims in the application. In fact, the Office Action acknowledges that the patent claims and application claims are directed to different elements, but states that this "does not prohibit this rejection if there is common or interrelated subject matter recited." The Office Action then references Schneller in support of this erroneous statement, not supported by Schneller.

The claims in the present application are distinct from the claims in the Harvey patents. As previously mentioned, the Office Action states that the independent and distinct standard was the main factor in the Schneller court's determination that the double patenting rejection should be affirmed. The Office Action has misinterpreted

this phrase. This phrase means independent 'or' distinct. MPEP (6th ed.) § 802.01. The MPEP defines independent as meaning "that there is no disclosed relationship between the two or more subjects disclosed" and that they are not connected. The MPEP defines the term distinct as meaning that "two or more subjects disclosed are related . . . but are capable of separate manufacture, use, or sale as claimed" Two or more subjects cannot then be unrelated, independent, and also related, and thus distinct. Analyzing the PTO's cited representative claims referenced in the Office Action, the claims of the present application are clearly distinct from the claims in the patents and therefore the claims in the present application are patentable. Although not required, Applicants will analyze the claims of the present application with respect to the designated representative claims of Harvey U.S. Patents 4,694,490 and 4,704,725.

2. Claim 6 of the present application is distinct from the first representative claim, claim 7 of U.S. Patent 4,694,490.

Patent 4,694,490, claim 7 claims a method of communicating television program material, said material including a video signal containing a television program and an instruct-to-overlay signal, to multiple receiver stations. The video signal is received and the instruct-to-overlay signal detected and processed by a computer. The computer generates and transmits its overlay video signals to a television receiver which presents a combined display of the television program and overlay video signals, said display specific to a specific user. Present application claim 6 relates to a method of delivering a receiver specific program to at least one of many receiver stations. A first and a second control signal is received. The second control signal operates to communicate the first control signal to an intermediate transmitter. The first control signal controls a computer to generate a receiver specific signal based on a receiver specific value also generated by said computer. A unit of programming is communicated to an output device based on said receiver specific signal. Patent claim 7 relates to presentation of

overlay signals combined with a television program, not necessarily specific to the receiver station. Present application claim 6 relates to presentation of a unit of programming specific to the receiver station. Present application claim 6 does not directly address or infer the concept of overlay signals at all. Patent claim 7 does not directly address or infer the concept of a receiver specific unit of programming. Patent claim 7 does not cover present application claim 6. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

U.S. patent 4,694,490, claim 7	Present application, claim 6 (as amended)
<p>In a method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay video signals, to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay video signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, and wherein a video signal containing a television program signal and an instruct-to-overlay signal are transmitted to said receiver stations, the steps of:</p> <p>receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations</p> <p>detecting the presence of said instruct-to-overlay signal at said selected</p>	<p>A method of delivering a receiver specific program at at least one of a plurality of receiver stations, each of said plurality of receiver stations having a computer and an output device, comprising the steps of:</p> <p>(1) receiving a first control signal at one or more origination transmitters;</p> <p>(2) receiving a second control signal at said one or more origination transmitters, said second control signal operative to communicate said first control signal to an intermediate transmitter; and</p> <p>(3) transmitting said first control signal to said at least one of said plurality of receiver stations, said first control signal effective at said at least one of a plurality of receiver stations to control said computer to compute a receiver specific value by processing information stored in said computer, compute a receiver specific signal based on said receiver specific value, and communicate a unit of programming to said output device based on said receiver specific signal.</p>

receiver stations at a time when the corresponding overlay is not being displayed, and coupling said instruct-to-overlay signal to the computers at said selected receiver stations, and

causing the computers at said selected receiver stations to generate and transmit their overlay video signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a combined display at the selected receiver stations consisting of the television program and the related computer generated overlay, the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.

3. Claim 6 of the present application is distinct from the second representative claim, claim 3 of U.S. Patent 4,704,725.

Patent 4,704,725, claim 3 claims a method of communicating output signals comprising data and user specific signals at a multiplicity of receiver stations from computers to output devices. At least some of the computers can modify the user specific signals by processing modification control signals. The computers communicate the data and user specific signals in response to a received and detected instruct-to-transmit signal. Present application claim 6 relates to a method of delivering a receiver specific program to at least one of many receiver stations. A first and a second control signal is received. The second control signal operates to communicate the first control signal to an intermediate transmitter. The first control signal controls a computer to generate a receiver specific signal based on a receiver specific value also generated by said computer. A unit of programming is communicated to an output device based on said receiver specific signal. Patent claim 3 relates to the communication of user specific signals. Application claim 6 relates to delivering a receiver specific program. A signal and a program are separate and distinct items that

serve different purposes and functions. Application claim 6 does not directly address or infer the concept of modification control signals. Patent claim 3 does not directly address or infer the concept of a computer generating a receiver specific signal based on a receiver specific value also generated by said computer, and then communicating a unit of programming to an output device based on said receiver specific signal. Patent claim 3 does not cover present application claim 6. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

U.S. patent 4,704,725, claim 3	Present application, claim 6 (as amended)
<p>A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of:</p> <p>transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device;</p> <p>detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected stations, and</p> <p>causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected</p>	<p>A method of delivering a receiver specific program at at least one of a plurality of receiver stations, each of said plurality of receiver stations having a computer and an output device, comprising the steps of:</p> <p>(1) receiving a first control signal at one or more origination transmitters;</p> <p>(2) receiving a second control signal at said one or more origination transmitters, said second control signal operative to communicate said first control signal to an intermediate transmitter; and</p> <p>(3) transmitting said first control signal to said at least one of said plurality of receiver stations, said first control signal effective at said at least one of a plurality of receiver stations to control said computer to compute a receiver specific value by processing information stored in said computer, compute a receiver specific signal based on said receiver specific value, and communicate a unit of programming to said output device based on said receiver specific signal.</p>

output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

4. Claim 6 of the present application is distinct from the third representative claim, claim 24 of U.S. Patent 4,965,825.

Patent 4,965,825, claim 24 claims a method of generating user specific output information at a multiplicity of receiver stations. Each receiver station is programmed with a special user application and has a computer adapted to generate user specific output information. Each receiver station has an output device to which its computer transmits a user specific signal. At a time when the user specific output information does not exist, an instruct-to-generate signal is transmitted to the receiver stations. In response to the instruct-to-generate signal, the computers generate and transmit to the output devices the user specific output information in user specific signals which are different, "with each output signal specific to a specific user". Present application claim 6 relates to a method of delivering a receiver specific program to at least one of many receiver stations. A first and a second control signal is received. The second control signal operates to communicate the first control signal to an intermediate transmitter. The first control signal controls a computer to generate a receiver specific signal based on a receiver specific value also generated by said computer. A unit of programming is communicated to an output device based on said receiver specific signal. Patent claim 24 relates to transmission of user specific information at a time when said information does not exist. Also, in patent claim 24, each receiver station is programmed with a special user application. These limitations and features are not directly addressed or inferred by present application claim 6. Present application claim 6 relates to delivering of a unit of programming based on a receiver specific signal. There is no limitation in

present application claim 6 that the unit of programming be delivered at a time when the programming or the receiver specific signal does not exist. Present application claim 6 does not address or imply the concept of the receiver station being programmed with a special user application. Patent claim 24 does not directly address or infer the concept of a computer generating a receiver specific signal based on a receiver specific value also generated by said computer, and then communicating a unit of programming to an output device based on said receiver specific signal. Patent claim 24 does not cover present application claim 6. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

U.S. patent 4,965,825, claim 24	Present application, claim 6 (as amended)
<p>In a method of generating computer output at a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific output information content and user specific signals to one or more associated output devices, with at least one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify said computers' method of processing data and generating output information content, each of said computers, being programmed to accommodate a special user application, the steps of:</p> <p>transmitting an instruct-to-generate signal to said computers at a time when corresponding user specific output information content does not exist, and</p> <p>causing said last named computers to generate their user specific output information content in response to said instruct-to-generate signal, thereby to transmit to each of their associated output devices an output information content and</p>	<p>A method of delivering a receiver specific program at at least one of a plurality of receiver stations, each of said plurality of receiver stations having a computer and an output device, comprising the steps of:</p> <p>(1) receiving a first control signal at one or more origination transmitters;</p> <p>(2) receiving a second control signal at said one or more origination transmitters, said second control signal operative to communicate said first control signal to an intermediate transmitter; and</p> <p>(3) transmitting said first control signal to said at least one of said plurality of receiver stations, said first control signal effective at said at least one of a plurality of receiver stations to control said computer to compute a receiver specific value by processing information stored in said computer, compute a receiver specific signal based on said receiver specific value, and communicate a unit of programming to said output device based on said receiver specific signal.</p>

the user specific signal of its associated computer, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

5. Claim 6 of the present application is distinct from the fourth representative claim, claim 15 of U.S. Patent 5,109,414

Patent 5,109,414, claim 15 claims a signal processing system which receives data from a data source and outputs the data to a matrix switch and a detector, control signals are detected within the received data and stored for further processing, and a processor controls the directing functions of (1) the matrix switch which receives the data as input and can direct selected portions of the data to a data transmission means and (2) the device which stores and transfers the control signals to the processor. Present application claim 6 relates to a method of delivering a receiver specific program to at least one of many receiver stations. A first and a second control signal is received. The second control signal operates to communicate the first control signal to an intermediate transmitter. The first control signal controls a computer to generate a receiver specific signal based on a receiver specific value also generated by said computer. A unit of programming is communicated to an output device based on said receiver specific signal. Patent claim 15 relates to controlling a matrix switch to communicating data from a single data source to a data transmission selectively by processing control signals which are detected within the data and stored for further processing. Application claim 6 does not directly address or infer the concepts of a matrix switch, a detector, or storage of control signals. Patent claim 15 does not directly address or infer the concept of a computer generating a receiver specific signal based on a receiver specific value also generated by said computer, and then communicating a unit of programming to an output device based on said receiver specific signal. Patent

claim 15 does not cover present application claim 6. The two claims are capable of separate manufacture, use, and sale as claimed. These two inventions are distinct.

U.S. patent 5,109,414, claim 15	Present application, claim 6 (as amended)
<p>In a signal processing system, a receiver/distribution means for receiving data from a data source and for outputting said data to a matrix switch means and a control signal detector means, a matrix switch means for receiving said data from said receiver/distributor means and for directing selected portions of said received data to a data transmission means, a control signal detector means for detecting control signals respecting said data and transferring said control signals to a storage/transfer means, said control signal means being configured to detect said control signals at a predetermined location within said data, a storage/transfer means for receiving and storing said control signals and for transferring at least a portion of said control signals to a processor means for further processing, and a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means based on instructions contained in said control signals.</p>	<p>A method of delivering a receiver specific program at at least one of a plurality of receiver stations, each of said plurality of receiver stations having a computer and an output device, comprising the steps of: (1) receiving a first control signal at one or more origination transmitters; (2) receiving a second control signal at said one or more origination transmitters, said second control signal operative to communicate said first control signal to an intermediate transmitter; and (3) transmitting said first control signal to said at least one of said plurality of receiver stations, said first control signal effective at said at least one of a plurality of receiver stations to control said computer to compute a receiver specific value by processing information stored in said computer, compute a receiver specific signal based on said receiver specific value, and communicate a unit of programming to said output device based on said receiver specific signal.</p>

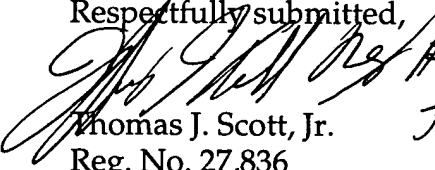
III. CONCLUSION

Applicants note for the record that Examiner has withdrawn the finality of the Final Office Action mailed March 19, 1997 in response to a phone interview with Mr. Scott. Applicants contacted Examiner after the interview to verify that finality had been withdrawn and to request a copy of Examiner's interview summary stating the withdrawal of the final rejection. No notice of the withdrawal of finality has been received by Applicants to date.

In accordance with the foregoing it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, that all pending claims patentably distinguish over the prior art, taken in any proper combination. Thus, there being no further outstanding objections or rejections, the application is submitted as being in a condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for telephone interview to discuss resolution of such informalities.

Date: September 16, 1997
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